1989 INDUSTRY REPORT CARD

APRIL 1989 VOLUME 169, No.4

CHILTON'S AUTOMOTIVE INDUSTRIES

Cover by Slideworks, Troy, MI.

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AUTOMOTIVE INDUSTRIES (ISSN 0273-656x) magazine is published monthly by Chilton Co., Chilton Way, Radnor, PA 19089. Chilton Company is a division of Capital Cities/ABC, Inc., New York, NY. Subscription rates: 1 yr. $39.95 US, $79.95 foreign. Phone (215) 964-4152. Second Class Postage paid at Wayne, PA 19087 and additional mailing offices. POSTMASTER: Send address changes to AUTOMOTIVE INDUSTRIES, Circulation Dept., Chilton Way, Radnor, PA 19089. © Chilton Company, 1989. Permission to photocopy for internal use or the internal use of specific clients is granted by Chilton Company for libraries and other users registered with the Copyright Clearance Center (CCC), provided that a base fee of $1.00 per copy of the article, plus 25¢ per page is paid to the CCC, 21 Congress St., Salem, MA 01970. Address special requests to The Editor. (0273-656x/85 $1.00 + 25¢)

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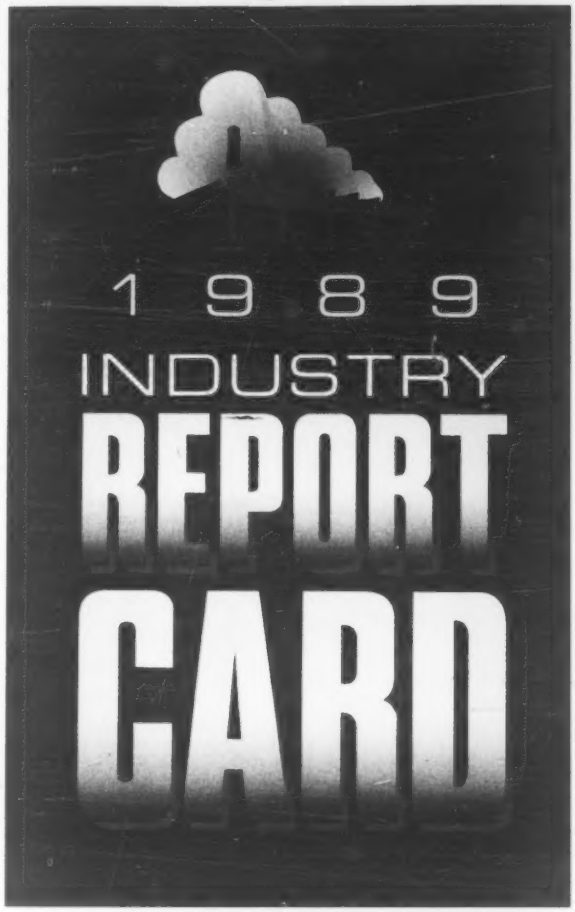


The second best year in history!

by JOHN McELROY

Who would have believed it? After all the hue and cry about the stock market crash in October 1987; after dire predictions of rising interest rates; and after many analysts were sure the expected downturn was finally at hand, 1988 turned out to be the second best automotive sales year in history. When all the dust had settled, the US market grew by nearly 4% in 1988, to 15.7 million units.

For the domestic automakers, it was a very good year. Combined profits of the Big Three totaled $11.2 billion, up from $9.4 billion in 1987. And GM, Ford and Chrysler all posted gains in market share – the ultimate measure of customer acceptance.

The imports, however, didn't fare as well. Every single European car company saw its US sales fall from the year before. And for the second year in a row, the Japanese were unable to sell all the cars they are allowed to bring in under the Voluntary Restraint Agreement (VRA).

Yet, the whole issue of what is an import and what is a domestic product continues to blur. Trans-

plant production grew to 616,000 units in 1988—a 13.3% increase over 1987. And this increase occurred even though VW closed its Westmoreland plant in July.

The drop-off in imports was even more pronounced with imported trucks which fell 20%. Not only are imported trucks saddled with a 25% import tax, but GM, Ford and Chrysler are fielding ever stronger products in this growing market segment. For the Big Three, being able to take truck share away from the imports is a major strategic goal. Why? Ten years ago, one out of four vehicles sold in the US was a truck. Today, the figure is one out of three.

No doubt about it, GM, Ford and Chrysler fared very well in '88. But to get a true picture, each one must be analyzed individually. So to put their performance in perspective, *AI* presents the 1989 Industry Report Card.

Under our system, each American automaker is graded according to how it performed in six different categories. Each grade is given based on trendlines that indicate whether or not the company is improving in those categories. We don't compare one company to another. We compare each company against its past efforts, and then sum it up with an overall grade.

1989 INDUSTRY REPORT CARD

Ford could surpass GM as the world's largest automaker sometime in the 1990s.

When the 1988 results came in Ford earned greater profits than GM for the third year in a row. And now it is starting to breathe down GM's neck when it comes to claiming which company is Number One in the world.

If measured in total dollar sales, Ford is 75% the size of GM—in vehicle sales it is 80% the size of GM. Five years ago, those figures were 60% and 64%, respectively. As we noted last year, Ford could conceivably surpass GM and become the world's largest automaker sometime in the 1990s.

QUALITY: Ford scored an important improvement in Quality, which is based on J.D. Power's Customer Satisfaction Index (CSI). But the latest CSI is based on data from 1987 models, a year in which Ford did not introduce any all-new cars, only facelifts. So we'll have to see if the company is able to maintain its current rating when the Continental, Probe and new T-Bird/Cougar are factored in during the coming years.

PROFIT PER UNIT: In 1988, Ford's profit-per-unit slipped slightly. Even though the company pulled in record profits from its overseas operations, it was somewhat dragged down by higher marketing costs—meaning dealer incentives—in the US. In addition, Ford is starting to spend big bucks on much-needed new powertrains. Nonetheless its performance is still spectacular.

MARKET SHARE: With the intense competition in the US market, any company that can hold its own can be considered to be doing well. Yet Ford continues to take share out of the hide of its competitors. The US car market rose 3.9% in 1988, but Ford's sales rose nearly 9%. It picked up one full percentage point of market share.

RETURN ON SALES: This category provides a measure of how much money a company is able to keep compared to the total amount of money it took in. And this is one of the few areas where the Ford Motor Company didn't keep up with last year's performance. A drop in earnings from the com-

FORD: STILL BEST IN CLASS

CATEGORY	SCORE	GRADE
QUALITY	106.0	B +
PROFIT/UNIT	$1014.0	A
MARKET SHARE	24.1%	A +
RETURN ON SALES	5.7%	B
PRODUCTIVITY	20.0	A +
INVENTORY	17.0	A
OVERALL GRADE:		A

Ford is still the teacher's pet.

Jay Asquini

pany's financial services contributed to the decline here. But even when you break out the automotive operations from the total corporate picture, the company still slipped from year-ago levels. Nevertheless, Ford is still best in class here.

PRODUCTIVITY: Once again, Ford showed that every year it needs fewer people to build more vehicles. And that efficiency translated into $2700 profit sharing checks for the average UAW employee working for Ford. For 1988, productivity was up nearly 7%, and though that wasn't as good as it achieved last year, it still rates as world class.

INVENTORY TURNS: Ford cranked out another solid improvement in how it ran its manufacturing operations. Inventory turns are a good measure of how well a company can match planning to production. Instead of building up huge banks of in-process goods, Ford was increasingly able to use exactly what it produced. And by eliminating inventory, it undoubtedly reduced repair work and scrap. And that in turn has a very positive effect on reducing costs at the same time it increases quality.

Chrysler's management has a well-earned reputation for not wasting time. When it comes to making decisions, they seem to get things done fast.

And while many industry observers expected Chrysler to take several years to fully integrate AMC's operations, it looks like the job might already be done.

QUALITY: Chrysler's strong showing in this category is nothing short of spectacular. It has pulled even with Ford, and as *AI* speculated two years ago. Its rate of improvement may push it right beyond Ford (*see "Will Chrysler's Quality Knock Ford Off Its Pedestal?" Jan. '87 AI*). One thing that should be pointed out, however: J.D. Power's CSI rating also factors in dealer service. When it comes to measuring quality as the vehicle leaves the factory, Ford is still ahead. Nonetheless, Chrysler is closing in very, very fast.

Chrysler: Making money on trucks.

CHRYSLER: AMC DIGESTED

CATEGORY	SCORE	GRADE
QUALITY	106.0	A +
PROFIT/UNIT	$243.0	D
MARKET SHARE	13.5%	A
RETURN ON SALES	2.9%	D
PRODUCTIVITY	18.0	B -
INVENTORY	22.9	B
OVERALL GRADE:		B -

PROFIT PER UNIT: For the first time in its history, Chrysler sold one million cars and one million trucks in the same calendar year. Yet in 1988, that didn't help the bottom line much. The company's profit per unit fell 50%. A big drag on profits was Chrysler's high incentive costs—rebates and low interest loans. The need for these sales incentives was especially critical on Chrysler's cars. The company's trucks, minivans and Jeeps do a much better job of selling themselves.

US MARKET SHARE: Chrysler's management has shown that it is unswervingly focused on the long-term view. By leaning heavily on aggressive pricing, the company has been able to increase its market share. That hurt the bottom line, but it sure moved a lot of product.

In our opinion, it is far better that Chrysler should sacrifice some short-term profits, rather than let its competitors steal its customers away. Indeed, this kind of competitive management thinking will probably prove far more effective to the long-term health of the company than trying to push for tariffs and quotas to keep the imports at bay.

RETURN ON SALES: Chrysler's sales rose by $6.2 billion last year, to $35.4 billion. Yet, its profits fell by nearly $240 million. Since its non-automotive operations (Chrysler Financial Corporation and Chrysler Technologies) produced record earnings, it's obvious that Chrysler's automotive operations were a big drag on profits. Indeed, non-automotive operations accounted for nearly 40% of the corporation's profits, even though they accounted for only 13.6% of sales!

PRODUCTIVITY: Chrysler achieved a 10% improvement in its worldwide productivity in 1988. And while *AI* commends the company for this, we still had to grade it rather harshly. Why? Because Chrysler still hasn't caught up to the level of productivity it achieved before it bought AMC.

But therein lies the catch. By the end of 1988, the ex-AMC manufacturing operations still hadn't been brought up to Chrysler's level of productivity. Yet, if Chrysler maintains its present rate of improvement, that will not be the case this time next year.

INVENTORY TURNS: Although Chrysler wasn't able to pull its productivity numbers up to their pre-AMC levels, it sure was able to do so in this category. In fact, to achieve such

a big improvement Chrysler's manufacturing people must be commended for the amount of in-process inventory they took out of the ex-AMC plants.

Like a locomotive leaving the station, General Motors is slowly but surely gathering steam. The driving wheels on the engine are slipping as it strains to pull all of the train cars down the track. And though there's an awful lot of weight to try and get moving, all the wheels are indeed starting to roll.

QUALITY: Zounds! According to the CSI rating, GM has blown right past Ford. In fact, the 1988 Power CSI rating puts Cadillac ahead of Toyota!

As we noted earlier, the CSI factors in dealer service. That's how Cadillac nipped Toyota. Yet when you look at the quality of cars as they come out of the factory (based on Power's Initial Quality Survey), it's amazing to see that the B-O-C group has rocketed up the chart, displacing Honda, Mazda and Lincoln along the way. This kind of quality is certain to improve GM's share of market.

1989 INDUSTRY REPORT CARD

GM managed to stop its 10-year-long slide in market share.

PROFIT PER UNIT: Whereas Ford and Chrysler slipped in this category, GM banged out a big improvement. And it was GM's overseas operations that contributed the yeoman's share, providing $2.7 billion in profits, up from $1.9 billion in 1987.

Even so, GM's North American operations improved their operating capacity by closing assembly plants in Norwood, OH and Pontiac, MI. The company sold a record amount of very profitable trucks. And GM's big-profit car lines – Cadillac and Buick – picked up their sales somewhat.

US MARKET SHARE: GM's performance in this category is something of a mixed bag. True, the company did manage to put a stop to its 10-year-long slide in market share. But it did this solely on truck sales – its car lines continued to lose share. Ominously, the GM10 cars failed to produce the sales gain the corporation was looking for.

Yet, if there's a silver lining in this, one has to remember that the Corsica and Beretta got off to a slow start, but now they're selling very strongly. If the four-door GM10s are able to pull off a similar resurgence, GM car share could pick up in 1989.

RETURN ON SALES: GM's bottom line is looking better all the time. Last year profits increased nearly 37%. That figure looks all the more impressive when you consider that GM paid no income taxes in 1987, yet paid nearly $1.5 billion in 1988. And it also put more money to the bottom line even though it had to absorb high marketing costs in the US market.

Of course, one major reason GM was able to improve its bottom line was by slashing capital spending by $1.6 billion from 1987 levels.

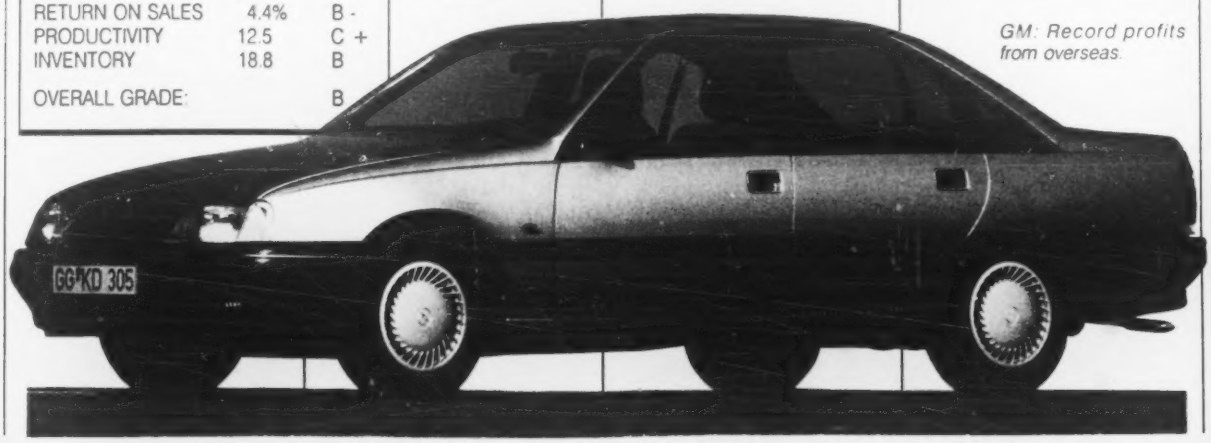
PRODUCTIVITY: In 1987 GM needed 673,000 employees worldwide to make 7,765,000 vehicles. In 1988, it only needed 624,000 employees to build 8,108,000 vehicles. That's how the company was able to boost its productivity.

Though GM is well behind Ford and Chrysler in this category, you have to remember that GM builds many more components in-house than the others do. In any case, we're not giving grades based on how GM fared compared to its domestic competitors – we're grading it on how it did compared to its own past efforts.

INVENTORY TURNS: If there is one area where GM has consistently improved, it's in this category. Inventory turns are an important measure of how well a company is managing its manufacturing operations, and though the progress may be slow, it is certainly steady. And as GM imbues its Synchronous Manufacturing system (*see "GM's Plant Saver, March '89 AI*) throughout its operations, and as it adopts more quick die change and quick tool change procedures, this number should become better still. AI

GM: GATHERING STEAM

CATEGORY	SCORE	GRADE
QUALITY	107.0	A
PROFIT/UNIT	$599.0	B +
MARKET SHARE	35.2%	C
RETURN ON SALES	4.4%	B -
PRODUCTIVITY	12.5	C +
INVENTORY	18.8	B
OVERALL GRADE:		B



GM: Record profits from overseas.

WORLDWIDE PRODUCTIVITY COMPARISON

Who gets the most out of their operations?

by JOHN McELROY

An *AI* survey of 1988 automotive production and employment shows that Japanese automakers still enjoy a huge productivity lead over their US and European competitors.

Despite strong strides in productivity improvements that have taken place in the US in the last five years, the least productive Japanese automaker (Fuji) is still 90% more efficient than the best American maker (Ford). And Fuji is three times more efficient than the best European maker (Peugeot).

Ford and Peugeot can be consoled because their productivity is up sharply, while that of Fuji, Nissan and Mazda are slipping. And both of them are even chipping away at Toyota's lead. Even so, it must be distressing to see that Toyota is so far ahead, and still improving.

This productivity comparison measures how many salary and hourly employees were needed to build the number of vehicles (cars, trucks, buses and tractors) produced in a given year. It also includes the employees involved in automotive parts producing operations.

But it excludes employees not involved in automotive production, such as those who work at Ford Aerospace, GMAC, or Fiat Aviazone. Nor does it include vehicles that may have been sold by one company, but built by another. The Ford Festiva (made by Kia), the Chevrolet Sprint (made by Suzuki) and Dodge Colt (made by Mitsubishi) are examples of these kinds of vehicles.

These productivity figures are not adjusted for the level of in-house parts production. However, it's unlikely that this would affect the rankings in this survey. For example, Chrysler makes 30% of its components in-house, which is the same as the Japanese automakers. So Chrysler's productivity is a very good apples-to-apples comparison with those of the Japanese.

And even if Ford's productivity figures were re-adjusted to represent a 30% level of in-house parts production, it would not move the giant automaker's ranking by even one position—although it would improve its 1988 output to 24 cars per employee.

Clearly, these productivity figures show that the competitive battleground is still sharply defined by geographic region. AI

PRODUCTIVITY RANKING BY AUTOMAKER

COMPANY	AUTOMOTIVE EMPLOYMENT	VEHICLE PRODUCTION	1988 VEHICLES/ EMPLOYEE	1985	1983
1. Suzuki	12,000	845,923	70.4	---	72.8
2. Toyota	65,000	3,968,697	61.0	57.3	58.0
3. Daihatsu	11,300	643,485	57.0	---	---
4. Honda	33,250	1,868,716	56.2	40.3	43.0
5. Mitsubishi	25,000	1,261,409	50.4	47.6	---
6. Mazda	29,089	1,220,664	42.0	47.0	43.4
7. Isuzu	13,800	575,978	41.7	---	---
8. Nissan	54,800	2,164,218	39.5	41.8	44.0
9. Fuji (Subaru)	15,372	595,286	38.7	40.7	46.5
10. Ford	318,175	6,375,558	20.0	16.9	14.3
11. Chrysler	131,438	2,361,250	18.0	17.0	16.4
12. Peugeot	158,100	2,102,500	13.3	10.5	---
13. General Motors	624,000	7,830,660	12.5	12.7	11.7
14. Volkswagen	253,000	2,849,600	11.2	9.2	---
15. Fiat	234,000	2,374,800	10.1	10.3	---
16. Volvo	75,340	470,220	6.2	7.0	---
17. Daimler-Benz	338,400	742,025	1.9	---	---

T&OHI DRIVELINE

Rockwell Marketing Cat Trannies

Rockwell has started selling Caterpillar-manufactured powershift transmissions for off-highway applications to OE manufacturers in Europe and North America. Nine models, **from 70 to 2000 hp ratings**, are being sold, all with a one-year, unlimited hours warranty. Don DeFosset, president of off-highway and driveline operations, says the new transmissions broaden Rockwell's product lineup and add another "critically important" drivetrain element. Still to come, and substantially more important, are on-highway truck transmissions from Rockwell.

The Good News Keeps On Truckin'

Last year proved an **even better year for trucks** in the US than the optimists hoped for. Most notable were the substantial gains in classes 4 and 8. Changes in the federal tax laws made the class 4 market more attractive, and drew in foreign competition like Iveco and several Japanese makers. In the big class 8 category, unexpected market strength continues in virtually every vocational and application grouping. Source: Motor Vehicle Manufacturer's Assocation.

US TRUCK SALES BY WEIGHT CLASS

Class	1988	1987	% change
Class 1 (to 6000 lb GVW)	2,926,028	2,696,127	+ 8.5
Class 2 (6001-10,000)	1,333,101	1,175,080	+ 13.4
Class 3 (10,001-14,000)	14,252	14,007	+ 1.7
Class 4 (14,001-16,000)	21,181	2,129	+ 894.9
Class 5 (16,001-19,500)	8,310	8,185	+ 1.5
Class 6 (19,501-26,000)	53,603	44,282	+ 21.0
Class 7 (26,001-33,000)	102,818	102,583	+ 0.2
Class 8 (33,001 and over)	147,749	131,156	+ 12.7
TOTAL	4,607,042	4,173,549	+ 10.4

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